

Appendix C
Current Residential Risk

APPENDIX C

Current Residential Risk

Table C-1. Residential risk summary.^{a, b}

		TRA-04 Human Cancer Risk	TRA-34 Human Cancer Risk	Hot Tree Site Human Cancer Risk
Acrylonitrile				
	100-yr Future	5.E-05 (5 in 100,000)	1.E-06 (1 in 1,000,000)	1.E-06 (1 in 1,000,000)
	30-yr Future	5.E-05 (5 in 100,000)	1.E-06 (1 in 1,000,000)	1.E-06 (1 in 1,000,000)
	Current	5.E-05 (5 in 100,000)	1.E-06 (1 in 1,000,000)	1.E-06 (1 in 1,000,000)
Arsenic				
	100-yr Future	3.E-05 (3 in 100,000)		
	30-yr Future	3.E-05 (3 in 100,000)		
	Current	3.E-05 (3 in 100,000)		
Beryllium				
	100-yr Future	1E-05 (1 in 100,000)	---	---
	30-yr Future	1.E-05 (1 in 100,000)		
	Current	1.E-05 (1 in 100,000)	---	---
Silver-108m				
	100-yr Future		3.E-05 (3 in 100,000)	
	30-yr Future		4.E-05 (4 in 100,000)	
	Current		5.E-05 (5 in 100,000)	
Cobalt-60				
	100-yr Future			
	30-yr Future	5.E-06 (5 in 1,000,000)		
	Current	3.E-04 (3 in 10,000)	2.E-05 (2 in 100,000)	2.E-05 (2 in 100,000)
Cesium-137				
	100-yr Future	1.E-05 (1 in 100,000)	5.E-06 (5 in 1,000,000)	2.E-05 (2 in 100,000)
	30-yr Future	5.E-05 (5 in 100,000)	1.E-05 (1 in 100,000)	1.E-04 (1 in 10,000)
	Current	1.E-04 (1 in 10,000)	5.E-05 (5 in 100,000)	2.E-04 (2 in 10,000)
Europium-152				
	100-yr Future	---		---
	30-yr Future	---	2.E-05 (2 in 100,000)	---
	Current	---	9.E-05 (9 in 100,000)	---

Table C-1. (continued).

	TRA-04 Human Cancer Risk	TRA-34 Human Cancer Risk	Hot Tree Site Human Cancer Risk
Uranium-238			
100-yr Future	2.E-06 (2 in 1,000,000)	---	---
30-yr Future	2.E-06 (2 in 1,000,000)	---	---
Current	2.E-06 (2 in 1,000,000)	---	---
Total Risks			
100-yr Future	1.E-04 (1 in 10,000)	4E-05 (4 in 100,000)	2E-05 (2 in 100,000)
30-yr Future	2E-04 (2 in 10,000)	7E-05 (7 in 100,000)	1E-04 (1 in 10,000)
<u>Current</u>	5E-04 (5 in 10,000)	2E-04 (2 in 10,000)	2E-04 (2 in 10,000)
a.	Source of 30-year and 100-year risk information is DOE-ID 1997b.		
b.	Only risks greater than 1 in 1,000,000 are included.		

Appendix D

Facilitywide Institutional Control Requirements

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Facilitywide Institutional Control Requirements

A comprehensive approach for establishing, implementing, enforcing, and monitoring institutional controls will be developed in accordance with Environmental Protection Agency (EPA) "Region 10 Final Policy on the Use of Institutional Controls at Federal Facilities" (May 1999). The following elements for waste area group (WAG) 2 institutional controls will be developed in the operation and maintenance (O&M) plan and will involve a facilitywide land use plan and procedures for controlling activities as outlined in the policy:

- A comprehensive facilitywide list of all WAG2 areas or locations covered by any and all decision documents at the facility that have or should have institutional controls for protection of human health or the environment. The information on this list will include, at a minimum, the location of the area, the objectives of the restriction or control, the timeframe that the restrictions apply, and the tools and procedures that the facility will use to implement the restrictions or controls and to evaluate the effectiveness of the restrictions or controls.
- Cover, and legally bind where appropriate, all entities and persons, including, but not limited to, employees, contractors, lessees, agents, licensees, and invitees. In areas where the facility is aware of routine trespassing, trespassers must also be covered.
- Cover all activities and reasonably anticipated future activities, including, but not limited to, any future soil disturbance, routine and nonroutine utility work, well placement and drilling, recreational activities, groundwater withdrawals, paving, training activities, construction, renovation work on structures or other activities.
- A tracking mechanism that identifies all land areas under restriction or control.
- A process to promptly notify both EPA and the State prior to any anticipated change in land use designation, restriction, land users, or activity for any institutional control required by a decision document.

Within six months of signature of this ESD, a monitoring report on the status of institutional controls at WAG 2 will be submitted to the EPA and Idaho Department of Health and Welfare. An updated institutional control monitoring report will be submitted to the EPA and Idaho Department of Health and Welfare at least annually thereafter. After the facility's comprehensive facilitywide approach is well established and the facility has demonstrated its effectiveness, the frequency of future monitoring reports may be modified subject to approval by EPA and the State. The institutional control monitoring report will contain at a minimum:

- A description of how DOE is meeting the facilitywide institutional control requirements
- A description of how DOE is meeting the WAG 2 specific objectives, including results of visual field inspections of all areas subject to WAG 2 specific restrictions
- An evaluation of whether or not all the WAG specific and facilitywide institutional control requirements are being met

- A description of any deficiencies and the efforts or measures that have been or will be taken to correct problems.

EPA and State review of the institutional control monitoring report will follow existing procedures for agency review of documents.

The DOE will notify EPA and the State immediately upon discovery of any activity that is inconsistent with the WAG specific institutional control objectives, or of any change in the land use or land use designation of a site addressed in the WAG 2 list of areas or locations covered by institutional controls. DOE will work together with EPA and the State to determine a plan of action to rectify the situation except in the case where DOE believes the activity creates an emergency situation, the DOE can respond to the emergency immediately upon notification to EPA and the State and need not wait for EPA or State input to determine a plan of action. DOE will also identify what went wrong with the institutional control process, evaluate how to correct the process to avoid future problems, and implement these changes after consulting with EPA and the State.

DOE will identify a point of contact for implementing, maintaining, and monitoring institutional controls.

DOE will notify EPA and the State at least six (6) months prior to any transfer, sale or lease of any property subject to institutional controls required by an EPA decision document so that EPA and the State can be involved in discussions to ensure that appropriate provisions are included in the conveyance documents to maintain effective institutional controls. If it is not possible for DOE to notify EPA and the State at least six months prior to any transfer, sale or lease, then DOE will notify EPA and the State as soon as possible but no later than 60 days prior to the transfer, sale, or lease of any property subject to institutional controls.

DOE will not delete or terminate any institutional control unless EPA and the State have concurred in the deletion or termination.